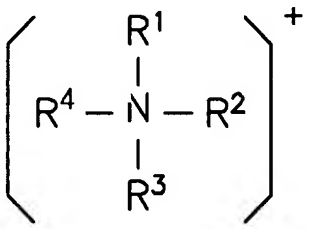
**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 5 – 9 and 11 – 12, CANCEL claims 1 – 3 without prejudice or disclaimer and ADD new claims 17 - 18 in accordance with the following:

1 - 3. (CANCELED)

4. (CURRENTLY AMENDED) ~~The electrolyte of claim 1~~An electrolyte for use in a lithium secondary battery, comprising an alkyl ammonium salt having a cation of the following Formula 1, a lithium salt, and an organic solvent:

Formula 1



wherein $R^1$ to $R^4$ are independently a $C_1$ to $C_6$ alkyl, a $C_2$ to $C_6$ alkenyl, or substituents thereof, and wherein an anion to be linked with the cation is at least one selected from the group consisting of bis(perfluoroethylsulfonyl)imide ($N(C_2F_5SO_2)_2^-$), bis(trifluoromethylsulfonyl)imide ($N(CF_3SO_2)_2^-$), tris(trifluoromethylsulfonyl)methide ( $C(CF_3SO_2)_3^-$ ), trifluoromethane sulfonimide, trifluoromethylsulfonimide, trifluoromethylsulfonate, $AsF_9^-$, $ClO_4^-$, $PF_6^-$, and $BF_4^-$.

5. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the concentration of the alkyl ammonium salt is 0.1 M to 0.8 M.

6. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the amount of the alkyl ammonium salt used is 1 to 15 wt % on the basis of the total electrolyte.

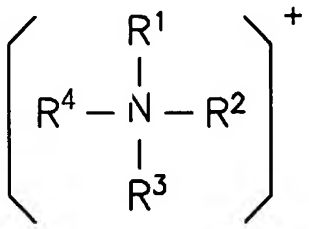
7. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the lithium salt includes at least one of: $LiPF_6$, $LiBF_4$, $LiSbF_6$, $LiAsF_6$, $LiClO_4$, $LiCF_3SO_3$, $Li(CF_3SO_2)_2N$, $LiC_4F_9SO_3$, $LiSbF_6$, $LiAlO_4$, $LiAlCl_4$, $LiN(C_xF_{2x+1}SO_2)(C_yF_{2y+1}SO_2)$ (where x and y are natural numbers), LiCl, and LiI.

8. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the concentration of the lithium salt is 0.1 M to 2 M.

9. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the alkyl ammonium salt and the lithium salt are in a mole ratio of 1:9 to 2:8.

10. (CURRENTLY AMENDED) An electrolyte for use in a lithium secondary battery, comprising an alkyl ammonium salt having a cation of the following Formula 1, a lithium salt, and an organic solvent:

Formula 1



wherein $R^1$ to $R^4$ are independently a $C_1$ to $C_6$ alkyl, a $C_2$ to $C_6$ alkenyl, or substituents thereof, wherein the organic solvent includes at least one of dimethoxy ethane, dioxolane, and mixtures thereof.

11. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the amount of the organic solvent used is 70 to 98% by volume of the total electrolyte.

12. (CURRENTLY AMENDED) The electrolyte of claim ~~1~~4, wherein the organic solvent comprises at least two groups selected from a weak polar solvent group, a strong polar solvent group, and a lithium-protecting solvent group.

13. (ORIGINAL) The electrolyte of claim 12, wherein:

the weak polar solvent is selected from an aryl compound, a bicyclic ether, and an acyclic carbonate;

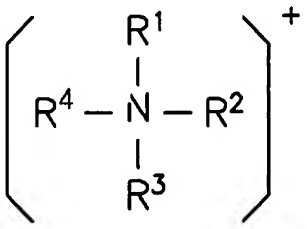
the strong polar solvent is selected from a bicyclic carbonate compound, a sulfoxide compound, a lactone compound, a ketone compound, an ester compound, a sulfate compound, and a sulfite compound; and

the lithium-protecting solvent is selected from a saturated ether compound, an unsaturated ether compound, a heterocyclic compound including N, O, and S, and a combination thereof.

14. (PREVIOUSLY PRESENTED) The electrolyte of claim 10, wherein the electrolyte is used in a lithium-sulfur battery.

15. (CURRENTLY AMENDED) A lithium[[-]]~~sulfur~~ secondary battery comprising an electrolyte which includes an alkyl ammonium salt having a cation of the following Formula 1, a lithium salt, and an organic solvent:

Formula 1



wherein $R^1$ to $R^4$ are independently a $C_1$ to $C_6$ alkyl, a $C_2$ to $C_6$ alkenyl, or substituents thereof and wherein the lithium-secondary battery is a lithium-sulfur battery.

16. (CANCELED)

17. (NEW) The electrolyte of claim 4, wherein the alkyl ammonium salt includes a tetraalkyl ammonium cation or a substituted tetraethyl ammonium cation.

18. (NEW) The electrolyte of claim 4, wherein the tetraalkyl ammonium cation is selected from the group consisting of a tetraethyl ammonium cation ($TEA^+$), a tetrabutyl ammonium cation ($TBA^+$), and a tetrahexyl ammonium cation ($THA^+$)